

# Pharmacist Involvement in Order Set Development Targeted for Hospital at Home Patients



Rana Al-Salameh, PharmD<sup>1</sup>, Christina Phelan, PharmD, BCPS<sup>1</sup>
1. Upstate Univeristy Hospital

# Background

- The services provided by Hospital at Home (HAH) are inclusive of various conditions including Chronic Obstructive Pulmonary Disease (COPD), Chronic Heart Failure (CHF), Cellulitis, Pneumonia, Diabetes Mellitus (DM), or those transitioning to end of life care.
- The HAH team comprises multidisciplinary healthcare professionals from both inpatient and outpatient settings. The goals of HAH include better clinical outcomes, decreasing readmissions, and shortening the traditional length of stay.
- A HAH palliative care order set was developed to improve the transition from the inpatient to HAH setting and to limit medication-related errors. This order set includes the following medications: acetaminophen suppositories, atropine ophthalmic solution, bisacodyl suppositories, haloperidol concentrated oral solution, lorazepam concentrated oral solution, morphine concentrated oral solution, ondansetron disintegrating tablets, polyethylene glycol packets, hyoscyamine sublingual tablets.

# Objectives

The goals were to evaluate the HAH palliative care order set effectiveness and multidisciplinary satisfaction. Specific outcomes include:

- (1.) Evaluate HAH interprofessional satisfaction while utilizing the palliative care order set for patient transfers and discharges.
- (2.) Assess accuracy of the palliative care order set compared to standard practice and treatment guidelines.
- (3.) Identify future changes needed to improve patient transfers and discharges.

## Methods

- This observational project surveyed multidisciplinary healthcare professionals utilizing an 18-question web based Qualtrics survey disseminated via email.
- The demographic information collected included age, gender, ethnicity, healthcare role, practice site, palliative care experience, and homecare services experience.
- The final survey consisted of 11 questions; 6 questions utilized a five-point Likert Scale, 2 questions were rank-based, 2 questions were multiple choice, and 1 question was openended.
- O Data collection began on June 28, 2024 and closed on September 12, 2024.

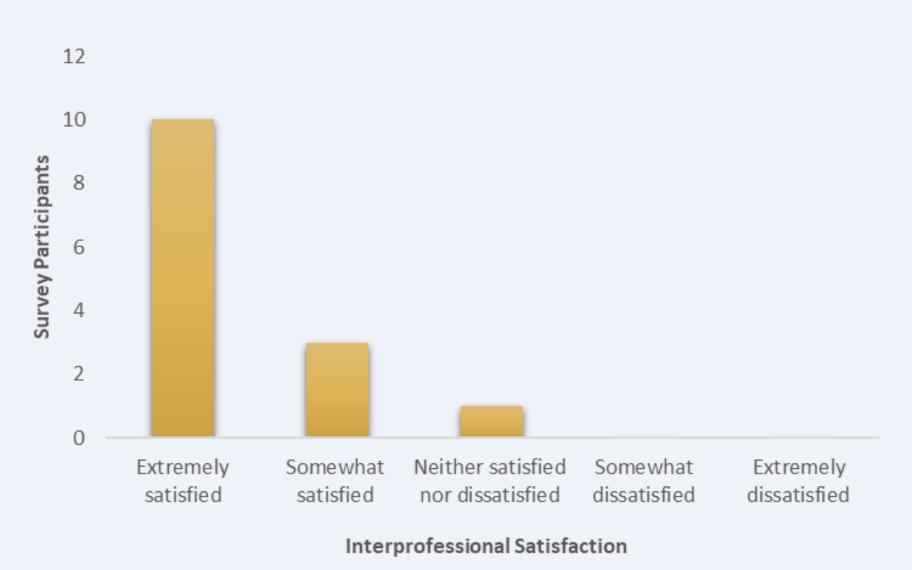
## Results

The survey was distributed to 24 health-care professionals and 17 surveys were partially completed and 14 surveys were fully completed, giving an overall response rate of 70.8%.

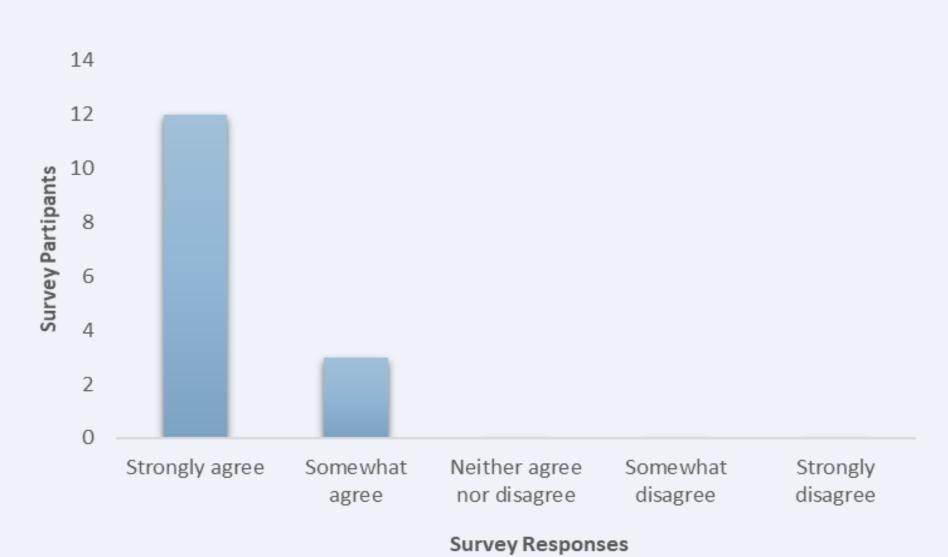
#### Table 1. Healthcare Professional Demographics

Patient Factors	Respondents, n (%)
Profession, (n = 17)	
Doctors	3 (17.6)
Nurses	3 (17.6)
Advanced Practice Practitioner (APPs)	6 (35.3)
Pharmacists	3 (17.6)
Administrators	2 (11.8)
Practice Site, (n = 17)	
Inpatient (hospital setting)	13 (76.5)
Outpatient (clinics)	0 (0)
Home Care	3 (17.6)
Other	1 (5.9)
Years of Experience in Palliative Care, (n = 16)	
<1 year	3 (18.8)
1-2 years	3 (18.8)
2-4 years	2 (12.5)
>4 years	8 (50)

#### **HAH Palliative Care Order Set Satisfaction and Clinical Relevance Feedback**



**Figure 1.** Interprofessional satisfaction with the HAH palliative care order set



**Figure 2.** Assessing accuracy of the palliative care order set compared to standard practice and treatment guidelines

#### Table 2. Future Improvements Needed to Improve HAH Patient Transfers and Discharges

Response	Respondents, n (%), (n=14)
Greater variety of palliative care medications	4 (28.6)
Various dosage formulations for each medication	5 (35.7)
Include medications in the order set which only reflect hospice's medication formulary	3 (21.4)
Pre-select medications in the order set which only reflect hospice's medication formulary	2 (14.3)
Enhanced communication with a pharmacist on medication-related questions	5 (35.7)
Other	4 (28.6)
None	2 (14.3)

## Discussion

- Most (92.8%) survey participants felt very or somewhat satisfied with utilizing the HAH palliative care order set and a majority (100%) expressed the order set aligns with current standard palliative care practice/guidelines.
- For future improvements, the frequency of morphine was recommended in the open-ended "other" answer to be changed to every 4 hours as needed instead of every 2 hours as needed to align with hospice's standard practice.
- Survey participants ranked the greatest benefits of utilizing the order set, 46.7% respondents ranked preventing medication prescribing errors as the primary benefit. The least beneficial aspect according to 46.7% respondents was sending prescriptions to the pharmacy to then be couriered home in a timely manner.
- Limitations: Sample size, participants were able to submit the survey without completing all questions and participants were reminded once to complete the survey before the deadline.

### Conclusion

- The HAH palliative care order set was developed in collaboration with the palliative care medical team to limit prescribing errors and align with hospice's formulary.
- Overall, majority (92.8%) of the interprofessional HAH team were satisfied with utilizing the order set and 100% respondents stated the order set is accurate in terms of reflecting standard practice and treatment guidelines.

## **Future Directions**

- Table 2 displays future improvements for the pharmacy department to consider incorporating into the HAH order set.
- HAH utilizes various order sets targeted towards specific patient populations (i.e DM, infusions, COVID-19). Our goal is to continue identifying patient populations that can benefit from the creation of more order sets utilized by the HAH team.
- Increase provider education on order set utilization to achieve a goal of 100% compliance.

# Acknowledgments

• Upstate University Hospital HAH multidisciplinary team, survey respondents, and hospice services.

# Disclosures

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation: Rana Al-Salameh: Nothing to disclose; Christina Phelan: Nothing to disclose

